

ABSTRACT

An object of the present invention is to provide a Group III nitride semiconductor element which comprises a thick AlGaN layer exhibiting high crystallinity and containing no cracks, and which does not include a thick GaN layer (which generally serves as a light-absorbing layer in an ultraviolet LED).
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The inventive Group III nitride semiconductor element comprises a substrate; a first nitride semiconductor layer composed of AlN which is provided on the substrate; a second nitride semiconductor layer composed of $Al_{x_1}Ga_{1-x_1}N$ ($0 \leq x_1 \leq 0.1$) which is provided on the first nitride semiconductor layer; and a third nitride semiconductor layer composed of $Al_{x_2}Ga_{1-x_2}N$ ($0 < x_2 < 1$ and $x_1 + 0.02 \leq x_2$) which is provided on the second nitride semiconductor layer.
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